

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

JB

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/600,134 09/11/00 LANG

G 05725.0654

EXAMINER

IM52/0411

FINNEGAN HENDERSON FARABOW
GARRETT & DUNNER
1300 I STREET NW
WASHINGTON DC 20005

PLRT, A	
ART UNIT	PAPER NUMBER

1751

DATE MAILED:

04/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/600,134

Applicant(s)

LANG ET AL.

Examiner

Anil K Puri

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

DETAILED ACTION***Double Patenting***

Claims 22-58 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim s 29-61 of co-pending U.S. application No. 09/600136. Although the conflicting claims are not identical, they are not patentably distinct from each other because both application teach mixtures of oxidation bases and couplers which are the same or overlap each other, used with a laccase enzyme in processes and kits used for the oxidative dyeing of hair. This is a provisional obviousness-type double patenting rejection because conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-24, and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aaslyng et al [WO 97/19998] Aaslyng et al teach a dyeing composition for keratin hair and a method for dyeing and use of a laccase enzyme for dyeing. Aaslyng et al teaches dyeing composition comprising a mixture of oxidation bases including the two ingredients in applicant's independent claim. Oxidation base is 3-methyl-4-aminophenol and direct dye their acid addition salt second component is laccase enzyme (See abstract claim 22-24) Aaslyng et al teaches that laccase is selected from plant, animal, Fungal, bacteria, biotech and microbial. The fungal origin includes *Araricus bisporus*, *Polyporus pinsitus*, *Myceliophthora thermophila*, *Rhizoctonia solani*, *Polyporus pinsitus*. (See claims 27-30 page 4 line 37, page 5, and line 1-38). Aaslyng et al also teach a m-aminophenol, polyphenols, m-phenylenediamine and its derivatives used as couplers or modifiers and m-diphenol in hair dyeing composition to produced different color and shades (See claims 31, page 8 1-12)

Aaslyng et al does teach laccases enzyme and oxidation base and couplers as component for dyeing composition in a working example but does not teach 3-methyl-4 aminophenol, heterocyclic couplers etc .It would have been obvious to one of ordinary

Art Unit: 1751

skill in the art at the time the invention was made to substitute p-aminophenol with 3-methyl-4 amino phenol since patentee teaches them as equivalent coupler listed on page 10 and line 2 in examples to formulate a composition for dyeing hair.

Claims 22, 25-26, 32-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aaslyng et al [WO 97/19998] in view of Audousset et al [5769903]. Audousset et al teach 3-methyl-4-aminophenol as oxidizing base in dyeing composition is discussed at (col.6, line 27 See claim 22) The oxidation bases represent 0.0005 to 12% by weight relative to the total weight of the dye composition (See claim 25,col. 9,lines 8-10) and 0.005-6% by weight relative to this weight (See claim 26, col. 9 line 11-12) Audousset et al teach heterocycliv couplers including sesamol, 6-hydroxyindoline, 6-hydroxyindole ,pyrazole and others couplers. (See claim 32, col.4 -7) Audousset et al further teach couplers represent in dyeing composition from 0.0001 to 10% by weight relative to this weight. And 0.005-5% by wt. Of the total wt. (See claims 33 and 34 col. 9, lines 18-22). Dyeing composition further comprises p-phenylenediamine, double base, o-amino phenol, heterocyclic oxidation base are discussed at (col.3-7 See claim 35) The oxidation base represent 0.0005 to 12% or 0.005-6% by weight relative to the total weight of the dye composition (See claims 36-37,col.9,lines 18-22) Oxidation base and couplers are used as acid-addition salts, which may be used in dyeing composition, selected from hydrochloride, hydrobromide, tartatates and sulphates. (See claim 38-40, col.4 lines 45-48) The dyeing composition may have medium for dyeing hair, which is suitable for dyeing including water or a mixture of water and at least one organic solvent to solubilize the

Art Unit: 1751

compounds, which would not be sufficiently soluble in water. Organic solvents which may be mentioned for example are c1-c4 lower alkanols such as ethanol and isopropanol, glycerol, glycols and glycol ether such as 2-butoxyethanol etc. (See claim 41-42, col.9, lines 23-33) pH of the oxidizing composition containing the oxidizing agents after mixing with the dye composition, the pH of the resulting composition applied to hair is from 3-12 or more preferably from 5-11 (See claim 43-44 col. 10 line 48-52) Dyeing composition may also include various adjuvants used in compositions for dyeing the hair such as anionic, cationic, nonionic, amphoteric or zwitterionic surfactants or mixtures thereof inorganic or organic thickeners, antioxidants, penetration agents, sequestering agents, fragrances, buffers, dispersing agents, conditioners such as silicones, film-forming agents, preserving agents and opacifying agents. (See claim 47 and 49, col.10, lines 1-9) The ready to use dye composition may be in various forms, such as in the form of liquids, creams, gels or any other form which is suitable for dyeing human hair. (See claim 45, 48 col.10, line 15-18) The ready to use dye composition further comprise a direct dye (See claim 46, see examples in col. 11 and 12) Audousset et al further discloses the multicompartment device or a dying kit for dyeing hair. A first compartment packaging system of which contains the dye composition including first oxidation base selected from para-phenylenediamines and their acid addition salts at least one second oxidation base selected from para-aminophenols and one coupler selected from meta-phenylenediamine, m-aminophenol and m-diphenols. A second compartment containing a laccase type enzyme in a medium appropriate for dying hair. (See claims 50-58, col.10, line 62-65)

Art Unit: 1751

Therefore, in view of the teaching of Audousset et al, one having ordinary skill in the art would be motivated to modify Aaslyng et al teaching by using other oxidation bases and or other couplers in particular in order to modify the shades or to enrich them with glints. The variety of molecules used as oxidation bases and couplers make it possible to obtain a wide range of colors. For example p-aminophenol, p-phenylenediamine dihydrochloride, 4-amino-3-methylphenol, 2,6-dimethyl-para-phenylenediamine dihydrochloride, 3,4 diaminopyrazole dihydrochloride, 4-hydroindole, 6- hydroindole, 4-hydroxybenzimidazole hydrobromide, 2,6 diaminopyridine and other modifiers or couplers that produced different color and shades in hair dyeing process. Also " Permanent coloration" obtained by means of these oxidation base are highly recommended. Such modification would be obvious because one would expect that oxidation base or couplers taught by Audosset et al would be similarly useful and applicable to the Aaslyng et al for dyeing hair.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anil K Puri whose telephone number is 703/605-4427. The examiner can normally be reached on 8:30 AM TO 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yougendra Gupta can be reached on (703)-308-4708. The fax phone

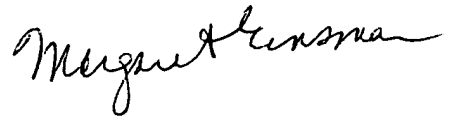
Application/Control Number: 09/600,134

Page 7

Art Unit: 1751

numbers for the organization where this application or proceeding is assigned are 703/305-3599 for regular communications and 703/305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703/308-0661.



AKP
April 9, 2001

**MARGARET EINSMANN
PRIMARY EXAMINER
GROUP 1100**